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# KernelSBOM: Reconstructing Linux Kernel Builds into Trusted SPDX Bills of Materials

*Thursday 11 December 2025 10:00 (45 minutes)*

This talk presents KernelSBOM, a tool that reconstructs the complete Linux kernel build graph by analyzing .cmd files to recover the exact commands, inputs, and outputs used during compilation. KernelSBOM generates three interlinked SPDX 3.0 documents—source, build, and output—that comprehensively encode all build metadata and dependencies. We demonstrate our approach, discuss its benefits for supply chain security and compliance, and examine current limitations. Our ultimate goal: make kernel SBOMs practical and integrate SBOM generation directly into the kernel build process.

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